

Freshwater Fisheries Monthly Report – May 2017

Stock Assessment

Piney Reservoir – This Garrett County reservoir was surveyed to monitor the status of its fish population community. The lake supports an outstanding largemouth bass fishery with plenty of quality to trophy size fish in the population. Bluegill were abundant, with many of the collected specimens in the eight to nine inch size class. Yellow perch were the most abundant panfish in the reservoir with a fair number of fish in the nine to twelve inch size class. However, there were a lot of yellow perch less than eight inches in the population, so the stocking of additional predatory species – tiger muskie and hybrid striped bass – will continue in order to reduce the yellow perch abundance and improve their growth rates. Rainbow trout, pumpkinseed, rock bass, green sunfish, white crappie, white sucker, brown bullhead, and golden shiner were also collected during the survey.



A trophy largemouth bass from Piney Reservoir

Brook Trout Telemetry Study – Staff conducted multiple radio telemetry searches for the 15 radio tagged brook trout in the upper Gunpowder River from the confluence with Prettyboy Reservoir upstream to York Road 1. Six of the 15 tagged brook trout were found in May. Ten of the 15 were found in April. The six trout found in May remained in the same locations where they were found in April. Two above Gunpowder Road and two in a large pool at the confluence of an unnamed tributary immediately below York Road were not found in May.

Staff corresponded with a fly fisherman who has fished the upper Gunpowder from Walker Run to the property line of River Valley Ranch three times since the brook trout were tagged in March and early April. He also fished Walker Run and Silver Run on the Baltimore City Watershed property. The angler uses dry flies only and has caught five brook trout in the upper Gunpowder, only one of which had a Visual Implant Elastomer (VIE) tag. He also caught 13 brook trout in Walker Run and 11 brook trout in Silver Run, none of which had tags.

Myrtle Grove Lake – Staff surveyed the fish community of Myrtle Grove Lake (Charles County). Fishes collected included bluegill, largemouth bass, black crappie, and golden

shiner, along with a good population of redear sunfish. Though data have yet to be analyzed, the fish community looks healthy and thriving. Several rainbow and brown trout were also observed during the survey, remnants of spring Put-and-Take Trout stocking.

Eastern Region Impoundments - Many of the impoundments within Eastern Region are overtaken by vegetation in the summer months. This can make traditional fall sampling with a boat mounted electrofishing unit difficult, so they are sampled in the spring. Staff sampled the following two impoundments this month.

Adkins Mills Pond – This county owned 5-acre impoundment is located in eastern Wicomico County. Most of the impoundment is flooded cypress swamp and is very shallow and silty. Dissolved oxygen levels in Adkins Mill Pond during the summer months are often poor, and this usually limits the pond's overall productivity. Largemouth bass reproduction is usually poor, so bass have been stocked into Adkins Mill regularly over the years to improve their numbers. Three electrofishing stations were sampled in the lower section of the pond and staff collected good numbers of largemouth bass, black crappie and bluegill sunfish. Although bass densities were not as high as other area impoundments, there are enough bass of decent size to create good recreational fishing. Good numbers of black crappie and bluegill sunfish were also encountered. Adkins Mill Pond has always produced large chain pickerel, and did not disappoint.



L-R: Chain pickerel and largemouth bass sampled in Adkins Mills Pond

Colburn Mill Pond – A county owned impoundment located in suburban Wicomico County outside Salisbury. Colburn Mill Pond has been drained and refilled several times over the last 10 years to allow for repairs to the dam and water control structure. Since the work was completed, the pond was restocked with largemouth bass, redear sunfish, bluegill, and golden shiner. Three electrofishing stations were sampled, which encompassed the entire lower portion of the pond. Overall, the results were impressive. Largemouth bass numbers and quality were excellent. The largest bass was over six pounds. Large redear and bluegill sunfish were also abundant. Colburn Mill Pond is providing quality fishing opportunities.



L –R: Redear sunfish, bluegill and largemouth bass sampled in Colburn Mill Pond.

Susquehanna River Walleye - Although the walleye fishery below Conowingo Dam on the Susquehanna River supports a popular fishery, little is known about the population. This month, staff began efforts to assess the population. Collecting walleye there has always been a challenge, since the waters below Conowingo are very dangerous. Instead of using conventional gear, walleye of all sizes were collected from the west fish lift of the dam to gather age and growth data. Walleye have been stocked below the dam annually, so the walleye collected will also be checked for a chemical oxytetracycline mark to indicate if they were of hatchery origin.

Habitat and Water Quality

Volunteer Clean-up - The Southern Garrett High School's Southern Bass Slayers Fishing Club teamed up with Department of Natural Resources staff to do a complete shoreline clean-up of Broadford Lake on Earth Day. Frostburg State University and Garrett College students also teamed up with staff to do a clean-up along the Savage River Trophy Trout Fishing Area. Thanks goes out to these volunteers for providing a more enjoyable fishing experience for all anglers at these locations!



Students from the Southern Bass Slayers Club, Frostburg State University, and Garrett College assisted Department of Natural Resources staff to clean up local waterways in Garrett County.

Hoyes Run - Met with members of the Youghiogheny Chapter of Trout Unlimited and a private landowner along Hoyes Run to discuss a possible livestock exclusion fencing project using the TU Embrace A Stream grant opportunity. The proposal will improve trout habitat in Hoyes Run and still supply a water source to 68 head of cattle plus several horses. About 1,300 feet of the stream's riparian zone and 135 feet of a major spring channel will be restored. **Update: The landowner was receptive to the project and the draft Embrace-A-Stream Grant was submitted to Trout Unlimited.**

Brook Trout Restoration - Annual maintenance work at the Little Laurel Run Brook Trout Restoration Project site was performed. Tree tubes were re-installed along the project area and staff evaluated last year's tree planting efforts. Tree survival was estimated at greater than 90%, and growth was remarkable, with some of the tree seedlings already growing above the four-foot tubes.

Environmental Review

- Central Region Freshwater Fisheries staff provided comments to the Environmental Review Program for trilogy requests from the State Highway Administration (SHA) concerning a culvert project on the Paint Branch at I-95 in Prince George's County and an 8,226 linear feet stream restoration project on Beaver Run in Carroll County.
- Lands Stewardship Committee (LSC):
 - A 73-acre potential acquisition adjoining the Warrior Mountain Wildlife Management Area. The parcel contains first order streams in the Bear Hollow Run and Lick Run sub-basins of the Town Creek Watershed. The Freshwater Fisheries Program supports this acquisition as it would provide long-term water quality protection in the upper Potomac River Watershed.
 - A 90-acre potential acquisition adjoining Wills Mountain State Park near Cumberland. The Parcel contains a first order tributary stream to Dry Run in the North Branch Potomac River Watershed. The Freshwater Fisheries Program supports this acquisition as it will provide long-term water quality protection in the upper Potomac Watershed.
- State Forest ID Team Project Reviews:
 - Reviewed a black cohosh ecology study in Savage River State Forest. No aquatic resource concerns.
 - Reviewed a road repair project by the National Guard on Green Ridge State Forest. No stream crossings or culvert replacements were needed for this project, so no aquatic resource concerns.
- Road/Bridge/Pipeline Projects:
 - Reviewed a test boring project on the Rt. 39 Bridge over the Youghiogheny River in Crellin, MD. If test procedures are followed as proposed, there should be little to no aquatic resource impacts.
 - Attended the pre-application site visit for a proposed Columbia Gas pipeline project that will run through Maryland from the Pennsylvania border to West Virginia near Hancock. Freshwater Fisheries will provide comments for this proposed natural gas pipeline during the environmental review process.

- Continued talks with Maryland Department of Environment and Soil Conservation District on the Morrell Property along Swanson Creek (Prince Georges County). The farm manager cut trees and bulldozed along the shoreline to provide a road for livestock along the creek. A mitigation plan was produced by Prince Georges County to address the damage. Freshwater Fisheries will continue to monitor the project and the potential negative impacts to fishes and other aquatic life in this stretch of Swanson Creek.

Water Temperature Data Loggers - Calibrated eight HOBO Water Temp Pro data loggers in preparation for deployment. Staff deployed Water Temp Pro loggers into the upper Gunpowder River below Gunpowder Road, Silver Run, and Walker Run. Staff assisted Patapsco Valley Chapter Trout Unlimited with the installation of Water Temp Pros into Conewago Creek, Long Arm Creek, Deep Run tributary to Big Pipe Creek, Board Run and Middle Run tributary to Liberty Reservoir in Carroll County.

Deployed a Yellow Springs Instruments (YSI) multiparameter sonde in Nanjemoy Creek, a tributary of the Potomac River in Charles County. The sonde will measure water quality parameters, including dissolved oxygen and water temperatures, during summer and early fall. In recent years, the creek has experienced low dissolved oxygen events so Maryland Department of Natural Resources aims to monitor these events.

Angler Survey - With assistance from Maryland Biological Stream Survey (MBSS), staff conducted an upper Gunpowder River angler survey at Gunpowder Road in Baltimore County on 4 week days, including Memorial Day, and 2 weekend days. The survey is intended to determine time of effort, what fishing gear anglers are using, what species of fish they are targeting, what species they caught if they were successful and if they kept any of the fish they caught. Each day was split into two survey periods of 7 hours (6:00 am-1:00 pm) and 7.15 hours (1:00 pm-8:15 pm). Biologists encountered and interviewed three anglers, two using spinners and bait, and one fly fishing. All three were targeting brook trout and all caught and released brook trout. Results of the MBSS surveys are not yet known.

Fish Health

Assisted researchers from the U.S. Geological Survey (USGS) Leetown Science Center working on a fish health study for major Mid-Atlantic river systems. Freshwater Fisheries biologists collected a small sample of smallmouth bass from the upper Potomac River that will be examined for a variety of contaminants and health issues. USGS researchers are particularly focused on the potential influence that endocrine-disrupting chemicals may have on the levels of intersex that have been observed in many of these fish populations.

Outreach

Junior Hunter/Angler Day - The Annual Western Maryland Junior Hunter/Angler Day was held at the Midland Sportsman Club in Allegany County. Participants were able to visit learning stations including Turkey Biology and Management; Shotguns/Claybirds & BB Gun; Archery; and Mentored Fishing. The clubhouse pond was stocked with rainbow

trout from the Bear Creek Trout Hatchery, and was opened to public fishing after the event. The event attracted about 50 children under the age of 16, and many of the young anglers caught a fish during the event!



A happy angler!

Customer Service - Responded to several customer service request regarding: Broadford Lake black crappie fishing opportunities; brown trout stocking locations; safe flows to float the North Branch Potomac River; and Put-and-Take trout fishing opportunities in Western Maryland.

Staff gave a filmed interview to the United States Army Corps of Engineers (USACE) regarding cooperative efforts between the Maryland Department of Natural Resources Fishing and Boating Services and the USACE that provide a great trout fishing resource in the North Branch of the Potomac River.

Brotherhood of the Junglecock - Participated in the Brotherhood of the Junglecock youth fishing and outdoor education event in northern Frederick County. Staff provided an entomology presentation and streamside macroinvertebrate instruction for youth anglers and their mentors.

Invasive Species

Staff provided Northern snakehead and blue catfish specimens for Maryland Natural Resources Police Cpl. Ray Griggs. The fish were used in a presentation and to show kids how to identify these invasive fishes.

Biologists collected Northern snakeheads from tributaries of the Potomac River. The fish were sacrificed and processed for the C&O Canal Stop the Snakehead Derby, held on June 3rd at the Pennyfield Lock. Additional information on the event can be found at: <http://dnr.maryland.gov/fisheries/Documents/Snakehead2017Flier.pdf>.

Stocking and Population Management

Trout Fingerling - The Youghiogheny River Catch-and-Return Trout Fishing Area was stocked with 6,191 Kamloops strain rainbow trout fingerlings (77/lb) from the Mettiki Hatchery.

Put-and-Take Trout - Assisted hatchery staff with the stocking of rainbow trout into regional ponds, lakes and streams as part of the Spring Put-and-Take trout season.

Walleye - The Savage Reservoir was stocked with 45,000 walleye fingerlings from the Manning Hatchery.

Hybrid Striped Bass - Broadford Lake received 600 hybrid striped bass that were raised to an average size of eight inches by students and Science Teacher Russell Metz, Maryland Department of Education, at the Meadow Mountain Youth Center. These fish were cultured at Manning Hatchery and transferred to the Youth Center to grow out to a larger size before stocking. Stripers and hybrid stripers are now being commonly caught in the lake by anglers.



Hybrid striped bass ready to be released into Broadford Lake.

Brood Collections - Provided brood stock redear sunfish, bluegill, and golden shiner to Manning Hatchery. Fish were collected from tributaries of the Potomac River, and Myrtle Grove Lake (Charles County). The progeny of these fishes will be used to fulfill stocking requests of state fisheries managers.

Fry and Fingerling Stocking - Biologists have been busy stocking southern Maryland waters with fry and fingerling produced at Manning Hatchery. Rocky Gorge Reservoir (Prince Georges and Montgomery counties) was stocked with striped bass, walleye, and tiger muskellunge. Additionally, over 260,000 largemouth bass fingerlings were stocked into tributaries of the tidal Potomac River.



Angler Access

Performed wader wash station maintenance and replaced damaged stations at angler access areas adjoining popular trout streams including the North Branch Potomac River, Savage River tailwater, upper Savage River and tributary streams, the Youghiogheny River, and the Casselman River. A total of eight wader wash stations were decommissioned and replaced with newly constructed stations.

Joined Land Acquisition and Planning staff to conduct property boundary identification on the south tract of the North Branch Potomac River Fisheries Management Area. Property corners were located and staff will re-paint the state land borders.

A fishing regulation informational sign was constructed and placed at the Broadford Lake boat launch. This multiple fish species sign shows seasons, size limits, creel and possession limits for striped bass, tiger muskie, Put-and-Take trout, and yellow perch. It also provides illustrations of each fish species.

Discussed with Washington Suburban Sanitary Commission the upcoming two-year closure (June 1, 2017 - summer 2019) of Triadelphia Reservoir (Howard, Montgomery, and Prince Georges counties) for necessary dam repairs. No public activity will be allowed until the impoundment is brought back to full pool. Freshwater Fisheries will remain apprised of the reservoir's status and provide updates for anglers on the Freshwater Fisheries Program webpage.

Brook Trout Program

Met with a Xylem representative to conduct updates to the real-time temperature probes on the North Branch of the Potomac River and the Lower Savage River. Due to high flows, updates were only conducted at the Lower Savage site. These data are used by the U.S. Army Corps of Engineers to manage the cold water storage and release from Jennings Randolph and Savage River Reservoir in order to best address the desires of many stakeholder groups on those tailwaters.

Completed a 10 year summary document describing the status of the upper Savage River brook trout population since the special brook trout regulation was implemented in 2007. Staff also completed a draft report on the results of the Wild Trout Angler Preference Survey that was conducted in 2016.

Completed the annual brook trout fisheries management plan report which will be posted on the Department of Natural Resources fisheries management plan website page.

Worked with Garrett County Soil Conservation District representatives to complete an Embrace A Stream draft grant application offered through Trout Unlimited. If awarded, funds will be used to help a local farmer develop an alternative water source. This will allow him to exclude cattle from a tributary to Poplar Lick in the Savage River watershed. These improvements will promote riparian buffer generation and improve water quality.

Continued work on the 2nd Annual Youth Trout Fishing Clinic to be held on June 3 at Big Run State Park. Many local and Maryland-based businesses have contributed to this event and it was very popular with both the kids and parents who attended last year.

Met with Freshwater Fisheries Program leadership to discuss planning for the next two year work plan for the brook trout outcome of the Chesapeake Bay Agreement.

Tidal Bass Program

Began work on a creel survey project to examine preferences and opinions of anglers fishing Maryland's tidal freshwaters.

Worked with American Bass Anglers aboard release boats during a large bass tournament.

Conducted a catch-and-release study of largemouth bass at Manning Hatchery. This study compliments an on-going, long-term mark-recapture project on Potomac River.

Organized a habitat workgroup meeting for the Black Bass Advisory Subcommittee.

Submitted comments in support of incorporating the Tidal Bass Fishery Management Plan into regulation in 2017.

Surveyed the Smoots Bay Artificial Reef at National Harbor (Charles County) and the surrounding area to determine fish use of the reef balls and woody structures, compared to nearby areas with natural bottom. Though analyses aren't complete, it appears that fish are congregating around the structures and that more fish occur within the reef than outside of those areas.

Biologists continue to tag largemouth bass from the Potomac River and its tributaries. To date, over 650 bass have been tagged in the multi-year project with over 200 of those fish tagged in 2017. The project aims to estimate catch-and-release mortality and population sizes within several Potomac River tributaries in Charles County.

Anglers continue to catch and report tagged largemouth bass from the Potomac River and its tributaries. Lucky anglers receive a letter with information and the history of the tagged fish they caught, a certificate, and commemorative bass conservation pin and/or hat. During May, over 20 tagged bass were reported.

Attended the American Bass Anglers Ram Open Series black bass tournament held at Smallwood State Park (Charles County) on the Potomac River. Monitored water quality conditions of the release boat - a boat with multiple tanks of water that allows fish caught in the tournament to recuperate before being returned to the river. Anglers had a good day of fishing, with the winner weighing in a five bass limit of 19.12 pounds with a 6.96 pound lunker for the day.

A study of adult largemouth bass is underway to determine the possible effects of piercing cull clips. Fish were caught with artificial lures and then tagged. A piercing cull clip was placed into the lip of each fish before placing them into a tank. The fish were later removed from the tank and stocked into an experimental pond at Cedarville Visitor Center (Charles County). The fish will be monitored for several weeks before release.